

REMARKS**1. Preliminary Matters****a. Status of the Claims**

Claims 1-16 are pending and under active consideration in this application. Claims 1-16 are hereby canceled without prejudice to pursuing the canceled subject matter in a continuing application; and claims 17-22 are new. Applicant respectfully requests entry of the amendments and remarks made herein into the file history of the application. Upon entry of the amendments, claims 17-22 will be pending and under active consideration.

b. Amendments to the Claims

Support for the amended claims can be found in the application as originally filed as described below in Table A.

Table A

| Claim | Support |
|--------------|--|
| 17 | claims as originally filed; Table 1, lines 3690-3691; Table 2, lines 14306-14310; Table 3, line 3686 |
| 18 | claims as originally filed; Table 1, lines 3690-3691; Table 2, lines 14306-14310; Table 3, line 3686 |
| 19 | claims as originally filed |
| 20 | claims as originally filed |
| 21 | claims as originally filed |
| 22 | claims as originally filed |

c. Amendments to the Specification

The section heading "BACKGROUND OF THE INVENTION" is removed from between the title and the section heading "FIELD OF THE INVENTION." The section heading "DESCRIPTION OF PRIOR ART" located after the section entitled "CROSS REFERENCES TO RELATED APPLICATIONS," which was added at page 1 of the specification in the amendment filed on September 19, 2005, has been replaced with the section heading "BACKGROUND OF THE INVENTION." The paragraph at page 2, lines 16 through 20 is amended to incorporate by reference the sequence listing submitted herewith. The paragraph at page 7, lines 21-23 is amended to specifically refer to Figs. 2A and 2B. The paragraphs at page 10, lines 7 and 8; page 10, lines 14-17; page 44, lines 6-26; page 44, line 27 through page 45, line 11; page 45, lines 12-19; and page 49, line 20 through page 50, line 4, are amended to assign a SEQ ID NO to each sequence in these paragraphs. The paragraphs at page 22, lines 5-8 and page 37, line 30 through page 38, line 24 are amended to add reference characters 132 and 146-149 to the description.

d. Amendments to the Abstract

The abstract has been added to a separate page at page 60.

e. Objections to the Specification**(1) Abstract**

On page 2 of the Office Action, the Examiner objects to the abstract because it should be on a single sheet. The application is amended to add the abstract on a single sheet following page 59 of the application. In view of this amendment, Applicant respectfully requests that the Examiner reconsider and withdraw the objection to the abstract.

(2) Sequence Rules

On page 2 of the Office Action, the examiner objects to the application because it allegedly does not comply with the sequence rules under 37 C.F.R. §§ 1.821-1.825. The Examiner asserts that sequences appearing at page 44, lines 14, 20, 22, and 24; page 45, lines 8, 10, 15, 16, and 17¹; page 49, lines 22, 24, and 26; page 50, lines 1, 3, and 4; Figure 23B; and Figure 24A, do not have sequence identifiers. Paragraphs at pages 44, 45, 49, and 50 are amended to assign sequence identifiers to the sequences in these paragraphs. Additionally, the brief descriptions of Figures 23B and 24A at page 10 are amended to assign sequence identifiers to the sequences shown in these figures. In view of the foregoing amendments, Applicant submits that the application complies with 37 C.F.R. §§ 1.821-1.825, and accordingly respectfully requests that the Examiner reconsider and withdraw the objection to the application under the sequence rules.

(3) Specific Discussion of Figs. 2A and 2B

On page 2 of the Office Action, the Examiner objects to the disclosure because Figures 2A and 2B should specifically be discussed in the description. Applicant notes that these figures are specifically discussed in the specification at page 11, lines 21-30 and page 12, lines 1-5, respectively. Nevertheless, the specification is amended at page 7, lines 21-23 to specifically discuss Figures 2A and 2B. In view of the foregoing, Applicant respectfully requests that the Examiner reconsider and withdraw the objection to the disclosure.

(4) Priority Information

On page 2 of the Office Action, the Examiner objects to the disclosure because the priority information on page 1 of the application should appear in the first sentence. Applicant submits that the preliminary amendment filed on September 16, 2005 and received by the Office on September 19, 2005 added the priority information for the instant application between the title and the section heading "Field of the Invention." As described above, the specification is amended to remove the header "BACKGROUND OF THE INVENTION" from between the title and the section heading "FIELD OF THE INVENTION." Upon entry of these amendments, the section heading "CROSS REFERENCE TO

¹ The Examiner typed "16, and 16", but Applicant believes the Examiner intended to type "16, and 17". If this is erroneous, Applicant respectfully requests clarification.

RELATED APPLICATIONS” and paragraph describing the priority information for the instant application appear beginning at the first sentence of the specification. In view of the foregoing, Applicant respectfully requests that the Examiner reconsider and withdraw the objection to the disclosure.

(5) Reference Characters in Drawings

On pages 2 and 3 of the Office Action, the Examiner objects to the drawings because they allegedly include reference characters 21, 46, 34, 57, 130, 132, and 146-149 that are not mentioned in the description. Applicant submits that reference characters 21 and 46 are described in the specification at page 13, lines 3 and 4, and reference characters 34 and 57 are described at page 12, lines 17-25. Furthermore, reference character 130 is described at page 22, lines 1 and 2. Additionally, the specification is amended at page 22, lines 5-8 and at page 37, line 30 through page 38, line 24 to add reference characters 132 and 146-149 to the description. Accordingly, Applicant submits that reference characters 21, 46, 34, 57, 130, 132, and 146-149 are mentioned in the description in compliance with 37 C.F.R. § 1.84(p)(5). In view of the foregoing, Applicant respectfully requests that the Examiner reconsider and withdraw the objection to the drawings.

2. Patentability Remarks

a. 35 U.S.C. § 112

(1) Second Paragraph

On pages 3-5 of the Office Action, the Examiner rejects claims 1-16 under 35 U.S.C. § 112, second paragraph as allegedly being indefinite. Specifically, the Examiner asserts that the following terms and claims are vague and indefinite: “bioinformatically detectable” (claims 1-9), “novel gene” (claims 1-9), “partial or accurate” (claims 1-3), “nucleotide sequence of a binding site associated with at least one target gene” (claims 1-3), “a function of said novel gene is bioinformatically deducible” (claims 1 and 2), “bioinformatically deducible” (claims 1, 2, and 4-6), “binding site associated with said at least one target gene” (claims 7 and 8), “selectively detecting expression” (claims 15 and 16), claim 15, and “gene expression detector” (claim 16). None of these terms is recited in the amended claims, thereby rendering the Examiner’s rejection moot.

The Examiner also asserts that the term “selective inhibition of translation of said at least one target gene” (claim 9) is misdescriptive and that the term “utilizing” (claim 12) is incomplete. Neither of these terms is recited in the amended claims, thereby rendering the Examiner’s rejection moot. In view of the foregoing amendments and remarks, Applicant respectfully requests that the Examiner reconsider and withdraw the rejection of claims 1-16 under 35 U.S.C. § 112, second paragraph.

(2) First paragraph**(a) Written Description**

On pages 5 and 6 of the Office Action, the Examiner rejects claims 1-16 under 35 U.S.C. § 112, first paragraph, as allegedly failing to comply with the written description requirement. The Examiner asserts that the limitations “genes” or “novel genes” do not have adequate support in the application. Applicant respectfully disagrees. Nevertheless, these limitations are not recited in the amended claims, thereby rendering the Examiner’s rejection moot. In view of the foregoing, Applicant respectfully requests that the Examiner reconsider and withdraw the rejection of the claims under 35 U.S.C. § 112, first paragraph.

(b) Enablement

On page 6 of the Office Action, the Examiner rejects claims 11-13 under 35 U.S.C. § 112, first paragraph as allegedly failing to comply with the enablement requirement. The Examiner asserts that the claimed subject matter pertains to methods for inhibiting expression of genes in cells and thus embraces gene therapy, and that to practice these claims would require undue experimentation by one of skill in the art. Applicant respectfully disagrees. Nevertheless, the amended claims do not recite methods for inhibiting gene expression. In view of the foregoing, Applicant respectfully requests that the Examiner reconsider and withdraw the rejection of the claims under 35 U.S.C. § 112, first paragraph.

3. Conclusion

Applicant respectfully submits that the instant application is in good and proper order for allowance and early notification to this effect is solicited. If, in the opinion of the Examiner, a telephone conference would expedite prosecution of the instant application, the Examiner is encouraged to call the undersigned at the number listed below.

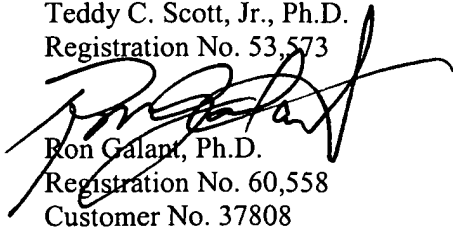
Respectfully submitted,

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Dated: June 26, 2008

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